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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,023	04/24/2001	Sung Lyong Lee	Q62058	4249

7590 08/12/2004  
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
WASHINGTON, DC 20037-3213

EXAMINER

NATNAEL, PAULOS M

ART UNIT PAPER NUMBER

2614

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/840,023

Applicant(s)

LEE, SUNG LYONG

Examiner

Paulos M. Natnael

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morrison, U.S. Pat. No. 6,591,292 in view of Mendenhall et al. U.S. Pat. No. 6,570,626.

Claim 1 is a method claim of claim 2 and, thus, Claim 1 is rejected for the same reasons as claim 2.

Considering claim 2, Morrison discloses the following claimed subject matter, note;

a) *an OSD source remote controller for generating an OSD object display command on a screen, is met by Remote Controller 125, fig.2, which a user may utilize to enable an EPG to display and in response to the remote control signal, the System Controller 115 produces a signal OSD-RGB. (see col. 7, lines 63-67 and col. 8, line 66 through col. 9, line 10)*

b) an OSD source for transmitting OSD display data by giving each OSD display data a peculiar ID in at least more than one OSD object unit and transmitting an OSD object ID

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and display location information...if there is an OSD object display command from said OSD source remote controller, ***is met by the system controller 115 in transport System 25, Fig.2, and by the disclosure that “The OSD menu may include an electronic program guide (EPG) as described above and other features discussed below. Data representing information displayed in the OSD menu is generated by system controller 115 in response to stored program guide information stored graphics information, and/or program guide and graphics information received via the input signal (e.g., StarSight data)...” (see col. 9, lines 2-11 and see also col. 8 lines 60-62)***

c) a display apparatus for **storing** at least more than one OSD object display data received from said OSD source in a memory, **reading** OSD object display data having a corresponding ID from the memory in response to received OSD object ID and display location information, and **displaying** OSD object display data on a screen, is met by the system illustrated on Fig.2 as a whole comprising the transport system 25 which generates the OSD menu, decoder 85, storage devices 90 and 105, and of course by the display screen as illustrated in Figures 4-7.

Except for;

d) the claimed “transmitting an OSD object ID and display location information without transmitting the OSD data”;

Regarding d), Morrison does not specifically disclose transmitting ID and display location information without actually transmitting the OSD data itself. However, such a

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method of transmission to save bandwidth is notoriously well known in the art of video/audio data transmission. In this regard, Mendenhall et al., teach an on-screen display format that reduces memory bandwidth for on-screen display systems, wherein some of the OSD image are represented by data sets that do not include a color palette...[and] by not including a color palette in an OSD data set, the correspond OSD image can be represented with a smaller data set and can be transferred across a bus with a smaller bandwidth. (see Abstract) Therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Morrison by providing the well known method of data transmission of Mendenhall so that the system would save bandwidth and/or memory space by not transmitting the OSD data.

Considering claim 3, the OSD object display apparatus of claim 2, wherein the OSD source comprises:

- a) an MPEG source for supplying a detected MPEG transport stream to the display apparatus, is met by the transport decode 55, fig.2;
- b) an OSD generator for generating OSD display data in bitmap format, is met by the controller 115, fig.2;
- c) a register for storing data, is met by the Smart Card 130, fig.2;
- c) a controller for controlling the MPEG source, the OSD generator, and the register, is met by system controller 115 as well.

Considering claim 4, the OSD object display apparatus according to claim 3,

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wherein the register is an output asynchronous plug register, is met by the Smart Card 130, fig.2;

Considering claim 5, a command input part for receiving a command signal from the OSD source remote controller and providing the command signal to the controller, is met by the remote input interface 120, fig.2.

Considering claim 6, the OSD object display apparatus of claim 2, wherein the display apparatus comprises:

- a) an MPEG decoder for decoding an MPEG transport stream and outputting image data, is met by the Transport Decoder 55, fig.2;
- b) a buffer for buffering OSD data, is met by Packet Buffer 60, fig.2;
- c) an overlapper for overlapping the image data and the OSD data and providing overlapped data to the screen, is met by Application Interface 70, fig.2;
- d) a controller for controlling the MPEG decoder, the buffer, the overlapper, the memory, and the screen, is met by system controller 115, fig.2;

Considering claim 7, the OSD object display apparatus according to claim 6, wherein the OSD object display apparatus further comprises: a display apparatus remote controller, is met by remote control unit 125, fig.2 or Remote controller 1125, fig.1;

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Considering claim 8, a command input part for receiving a command signal from the display apparatus remote controller and providing the command signal to the 5 controller, is met by Remote Unit Interface 120 fig.2 or IR Receiver 1122, fig.1;

### ***Response to Arguments***

3. Applicant's arguments filed May 25, 2004 have been fully considered but they are not persuasive. Response to arguments follows.

#### Applicant's Arguments

Morrison does not disclose transmitting ID and display location information of an OSD objection without transmitting the OSD display data.

#### Examiner's Response

See rejection of claim 2;

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paulos Natnael  
August 8, 2004



**PAULOS M. NATNAEL**  
**PATENT EXAMINER**